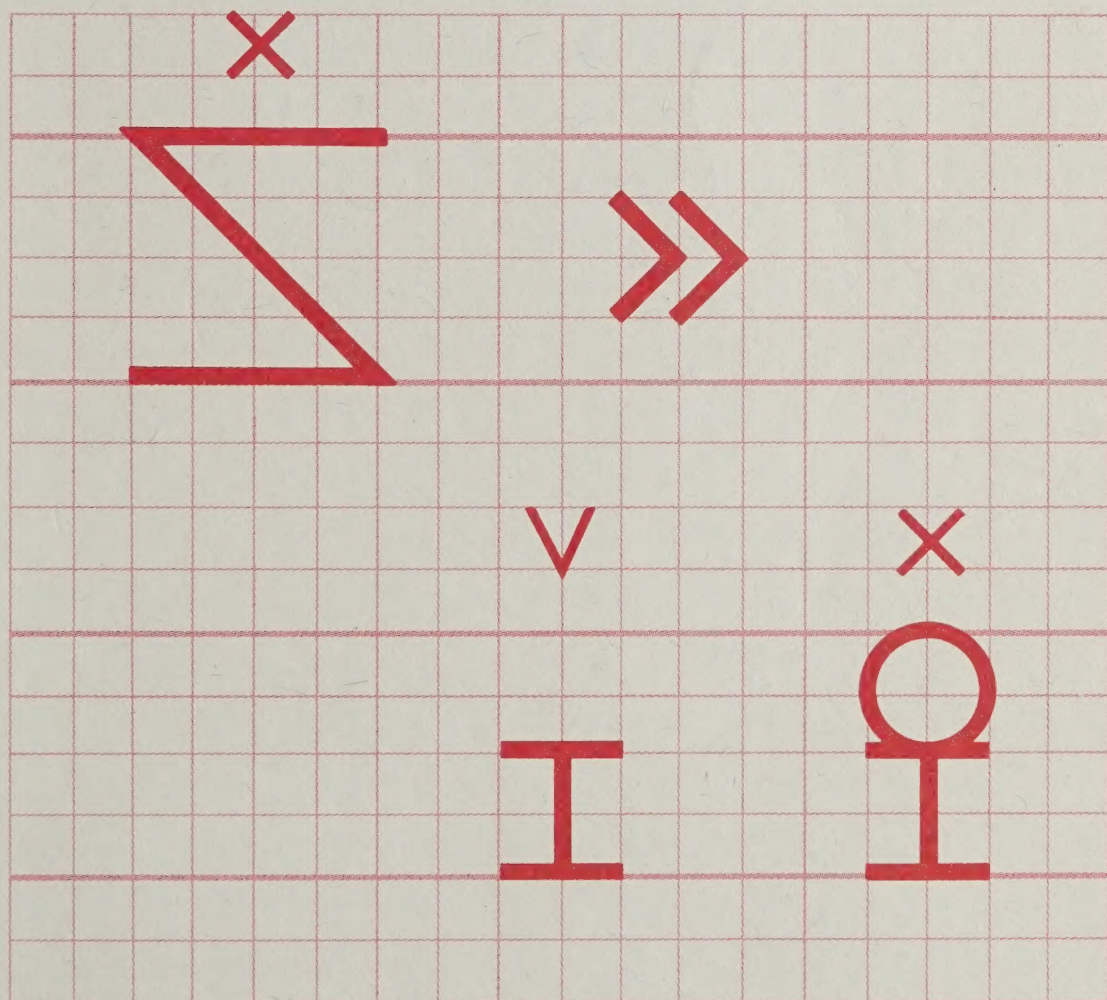


Blissymbols ^{For}Preschool Children

ANNE WARRICK



Blissymbols ^{For}Preschool Children

ANNE WARRICK

ACKNOWLEDGEMENTS

Everyone I have met through symbols has in some way contributed to this little booklet. However, I would like to say a special "thank you" to the following: Mr. C.K. Bliss, for sharing his symbols with us; Shirley McNaughton, Barbara Kates, and Jinny Storr, Blissymbolics Communication Institute, for their guidance regarding content and symbols; Sheila Young, Preschool Teacher, and her assistant, Ruby Weinshanker, for implementing the programme and providing me with much insight into early childhood education, and lastly George, Jocey, Karen, and Kevin, for making it all happen.

The Blissymbols illustrated herein are in accordance with BCI approved symbols.

Copyright © 1978, 1982

The Blissymbolics Communication Institute

Toronto, Canada

Second Edition, 1982

Editor: Barbara Hehner

Design: Jack Steiner

Ⓢ indicates — 1) a symbol which differs from the C.K. Bliss version either in symbol form or accompanying wording or — 2) a new BCI symbol authorized in the absence of requested comment from C.K. Bliss.

Ⓢ Ⓢ


_____ A symbol expression enclosed between combine indicators signals that the particular symbol grouping illustrates one possible way of representing this meaning in Blissymbols. Such a combined symbol is not at present a part of the standard BCI Blissymbol vocabulary.

The symbols on the cover represent the words BLISSYMBOLS FOR LITTLE CHILDREN.

INTRODUCTION

Ottawa Crippled Children's Treatment Centre provides an integrated programme for handicapped children. Physical, occupational, and speech therapy, along with family counselling and a half-day preschool, are available for children from two-and-a-half to four years. During the school year, September 1975 — June, 1976, the enrollment in the preschool was such that a symbol programme could be established for a small group of children — four in all. A typical school day consisted of free play, an organized activity, juice and cookies, circle time — either story or music — and the occasional outing away from the Centre. It was our aim that within this setting Blissymbols could "come alive" and be included in every daily experience for staff and children alike.

Our small "Bliss" family lasted for only one year. Developmental rates varied, parents relocated and programmes changed. However, it was a year to remember, we learned much, and I hope that by sharing it with you, other children may benefit from your knowledge of our experience.



Digitized by the Internet Archive
in 2022 with funding from
University of Toronto

Assessment — Who is a “Bliss” Child?

The speech therapist working in a treatment centre setting is frequently the person responsible for the assessment and selection of children suitable for a non-speech communication system.

Studies of prognosis in cerebral palsy have proven that the presence or absence of infantile reflexes do provide for accurate assessment of both physical and communicative skills. As a speech therapist, my role within the centre was, therefore, to examine each child for the presence or absence of the following postural and tonic reflex reactions: (a) Moro reflex, (b) Neck righting reflex, (c) Placement reaction of the legs, (d) Stepping reaction, (e) Parachute reaction, (f) Asymmetrical tonic neck reflex, and (g) Symmetrical tonic neck reflex, in order to establish a motor developmental age level.

Appreciation of sensory stimulation to oral and facial musculature should also be observed, since the severely handicapped cerebral palsied are frequently hypersensitive to touch, sound, and temperature, all of which may bear some relationship to subsequent therapeutic programmes.

Oral motor function should be evaluated too. It is unlikely that grossly involved children will exhibit speaking skills, since the reflexive stages of oral motor function parallel that of physical reflexive function. Unless the sucking, swallowing, and chewing become dissociated from total body reactions, the oral motor skills required for articulate speech will be impaired, and the child's attempts at speaking will be limited to vocalizations. Grossly affected feeding patterns, frequently described by parents, will reinforce the probability of a non-speaking child.

In the light of such severe physical limitations as those just described, and which are usually considered to be indicative of intellectual disability, how can levels of intellectual functioning be evaluated? Whenever possible, psychological assessment by someone familiar with severely physically handicapped non-speaking children is desirable. Unfortunately, this service is not always available, and

one must then rely on personal observations. One can consider how the child has adapted to his handicap. Does he have a yes/no response to questioning, either by facial expression, gesture, or eye movements, thus indicating his ability to comprehend, to make choices, and to exhibit a desire to communicate? Is the child interested in his environment? Does he show curiosity? Does he respond to humour in a situation? Does he respond appropriately to environmental changes? If the answer to these questions is "yes," one must presume a favourable innate intelligence, though this will become modified to a degree by physical limitations. However, it is our obligation to ensure that such modifications are minimal. This necessitates the accurate assessment of receptive language skills, and the development of each child's knowledge through the expansion of environmental experiences.

Children's receptive language skills can be assessed by the use of standardized tests. The Carrow Test of Auditory Comprehension, the Preschool Language Scales, Peabody Picture Vocabulary Test, and the French Pictorial Test of Intelligence have all been extremely useful to me in the assessment of receptive language levels. Informal assessment through observation of the child is also essential.

Communication requires the interaction of "speaker" and "listener," and frequently this becomes an unhappy situation for a severely handicapped baby. While talking to her child, a mother may, due to the elements of athetosis or spasticity present in the child, encounter bizarre behaviours and facial grimacing that are difficult for her to accept, thus causing her to withdraw from communication. The bewildered child also withdraws and in so doing, unknowingly initiates the retardation of his personal and emotional growth, much of which would otherwise be accomplished by the parent-child relationship. It is obvious that both parents and child are going to need much support when introduced to a programme attempting to revive and expand upon a previously unhappy situation.

Once satisfied that non-speech communication, either alone or alongside a neurophysiological approach, would be in the child's best

interests, it is time to discuss this treatment plan with his parents. Without their understanding and their support of the programme, its success is in doubt. If this interview is handled honestly and sincerely, with their child's best interests at heart, the parents may express reservations, but it is unlikely that they will show outright hostility. In fact, most parents, realising the necessity for their child to develop receptive language and a substitute means of communication in order to facilitate both general learning and the child's educational programme, will be only too pleased to assist in any suggested therapy plan. Remember that parents are your greatest allies — they know their children far better than you do. Consult with them often and include them in preschool activities, such as parties for birthdays, Valentines, and Halloween, whenever possible. Children also love to have their parents and brothers and sisters along on outings. Your symbol programme is going to be a family affair, so I would recommend that you involve the whole family in your setting, so that they can see how it functions.

It is important to explain to the parents and, more simply, to the child that for a while he is going to be using his hands as well as his mouth to talk. Tell him that it will help his mommy, his friends, and yourself if he can show you as well as tell you what it is he would like to do or what he would like to play with, and so the process of transferring from oral to manual skills begins.

Initiating the Programme — Vocabulary Design

Your first step is to establish a reliable yes/no response by hand function. Meaningful pictures are required, and I have found two, adapted from the Mechem language programme, to be very effective. It seems that a child, once assessed as being suitable for symbol learning, has a good appreciation of the fact that being mean to the family cat is a "no-no," whereas warmth and affection are highly acceptable qualities. These pictures, or others that you may prefer, are placed on the left and right hand side of the child's lap tray for "no" and "yes"

respectively and the child is trained to use them for every positive or negative response. As this behaviour becomes established, the plus and minus signs can be added to each, in preparation for transference to symbols.

Pictures may also be added to the surface of the lap tray — usually showing basic needs: food, drink, toilet, photographs of the family, etc., until a complete picture board can be anticipated. On pages 10 and 11 is a picture board with the linguistic arrangement similar to a standard Blissymbol display. On the left are personal nouns: Mum, Dad, Doug (for whom the board was made), girl, boy; to the right of these people are actions; further right again, we see descriptives and finally objects.

I personally liked this display greatly and assumed that it would be more attractive to a young child than a Blissymbol display. I mention this because I superimposed my thoughts on the children. I never once saw them spontaneously reach for this display in preference to a symbol display, and I think one should be ever watchful to use materials that the child, rather than the teacher, finds attractive. There is also the possibility that true pictures are associated in the child's mind with books, but that symbols have become associated in the child's mind with speech, and in consequence the child selects that object most appropriate to the immediate situation — usually communication — and will thus pick up his symbol display in preference to anything else.

yes

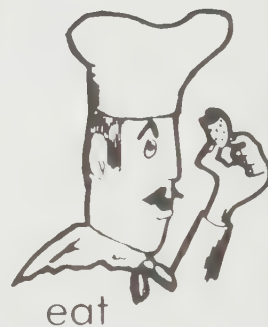
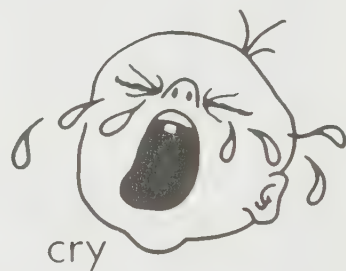
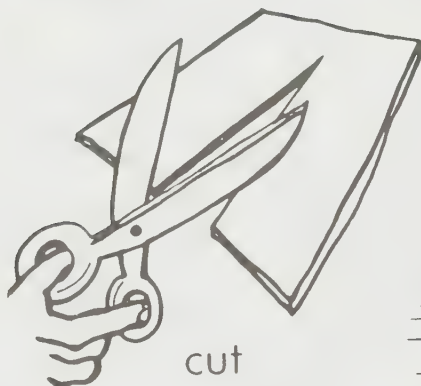
+!!



no

-!!







funny



good



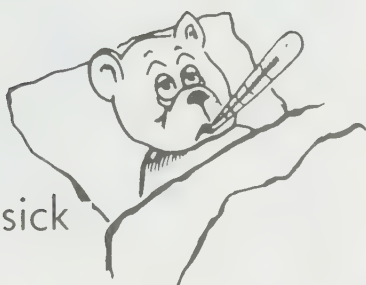
juice & cookies



home



happy



sick



book



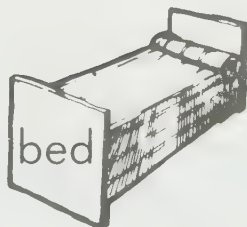
pencil



little



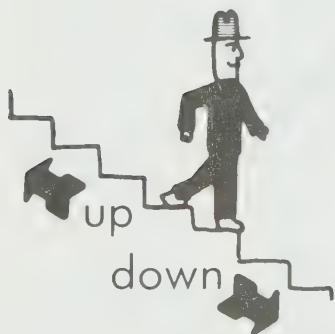
big



bed

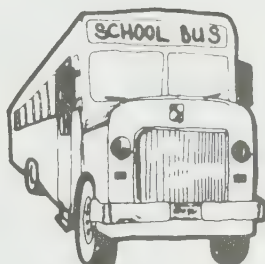


record

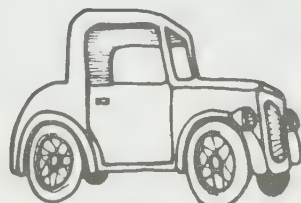


up

down



schoolbus



car



sad



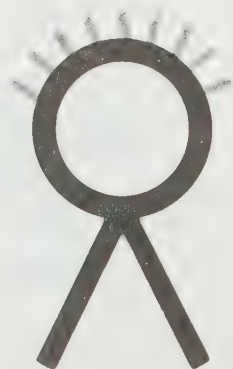
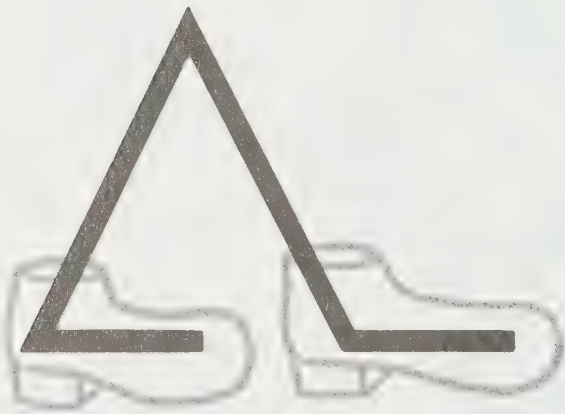
mad

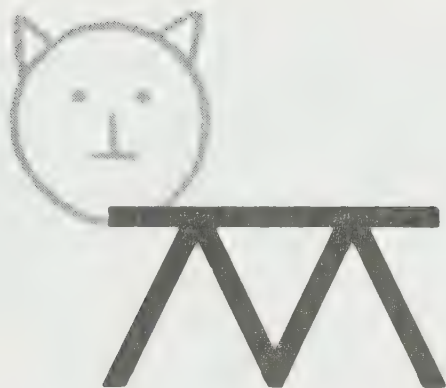


circle



T.V.





Alongside the learning of the manual yes/no response and the indication of pictures, the children were being exposed to basic pictographic symbols. When “helpers” were needed — by this I mean transitory additions to symbols to assist the child’s comprehension and learning — these lines were always drawn in a colour, with each symbol remaining basic black. The colours were then gradually faded, as learning occurred, finally leaving the original symbol. I would recommend that additions to symbols be as simple as possible and appropriate to the child’s usual environment: for example, I prefer the *food* symbol drawn with a spoon rather than a knife and fork for a severely handicapped cerebral palsied child, since spoon feeding fits his personal experience better. Occasionally you can manage a bonus — two symbols for the price of one — as in the *animal* with symbol *face*.

It is necessary to design a core vocabulary for symbol users who want to communicate with each other. In attempting this, I tried to include those elements of language that one would expect to find in the verbal three-year-old’s speech, although the number of symbols in the display had to be limited to the quantity from which the child could select successfully, either for cognitive or manual reasons. It seemed that frustrations were encountered with either too many or too few




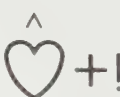




























symbols, so to meet this situation we finally decided on a 64-symbol display. The display shown on pages 16 and 17 contains 10 personal nouns, 2 questions, 8 verbs, 8 prepositions, 4 descriptives and 32 proper nouns (the colour coding of the Blissymbolics Communication Institute was used). In addition to a core vocabulary, the children were also provided with supplementary vocabularies to meet specific needs and two of these vocabularies are shown. The first was designed to go along with the opening of a new playground area at the hospital; the second was to complement summer activities. The combined symbols in these displays were created from the children's known vocabulary of basic elements.




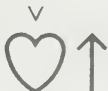




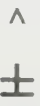






















Knowledge of the development of cognition and language is necessary in the design of a symbol display. Teachers must decide for themselves whether they will require their pupils to understand the meaning parts of each symbol before introducing it on a lap tray, or whether they will teach a symbol arbitrarily. For example, in the symbol for *angry* the meaning parts of the symbol are much (*multiplication*) feeling (*heart*) of antagonism (*opposition*). The graphic representation of this symbol is obviously too complex for a three-year-old, and yet it is important for him to be able to express anger. The *angry* symbol can therefore be taught arbitrarily, or a picture can be substituted instead. With the latter approach, the end result will be a display of both symbols and pictures.

During the preschool years, children learn concepts of space, time, quality, quantity, and size in an orderly fashion, by manipulating themselves, concrete objects, representational objects, and finally pictures. They express the knowledge of concepts by language and by such words as "big," "little," "in," "more," etc. When using symbols to reinforce cognitive and language development, it becomes important to know the normal order of concept acquisition. It is convenient to use a two-dimensional graphic representation, for example:


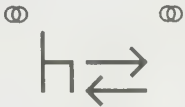




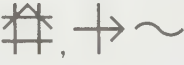


Concepts of Size	Age of Acquisition	Concepts of Space	Age of Acquisition
little	3.0	in	3.0
big	3.6	up	3.0
fat	3.6	between	4.0
tall	4.6	under	5.6

From these examples it follows that, in developing a symbol display, one should parallel the developmental sequence when introducing a new vocabulary. For example, teach the symbol for *little* before *big*, and *in* before *between*. This type of information can be obtained from books on language development, or by discussing with a speech pathologist the interpretation of the recording sheets used in tests given to assess children's speech and language skills.

I, me	you	they, them	(to) like
			
baby	girl	boy	(to) want
			
what thing	woman	man	(to) walk, go
			
who	mother	father	(to) see
			
food	clothing	house	book
			
(to) drink	container	outing	paper, page
			
wheelchair	animal	show place, theatre	pen, pencil
			
motor car	sick	school	story
			

(to) come 	in, inside 	a, an 	happy 
(to) give 	on 	the 	sad 
(to) have 	to, towards 	with the help of 	big 
(to) make 	for 	not 	little, small 
chair 	cupboard 	tree 	sun 
table 	colour 	flower 	rain 
bed 	night 	country(side) 	record 
toilet 	day 	bird 	gathering 

Preschool Playground

<div>swing</div> <div></div>	<div>rocking horse</div> <div></div>	<div>slide</div> <div></div>
<div>picnic</div> <div></div>	<div>wading pool</div> <div></div>	<div>sand box</div> <div></div>
<div>swimsuit</div> <div></div>	<div>towel</div> <div></div>	<div>rake</div> <div></div>

Summertime

sun	spring	hot	(to) grow
			
boat, ship	tricycle	bicycle	(to) swim
			
flower	seed	tree	(to) play
			
grass	hill	park	country(side)
			
lawn	insect	visitor	(to) help, aid
			

funnel

bridge

sailboat



It is also well to remember that *Semantography* contains the occasional pictographic symbol suitable for preschool children that does not appear in *Blissymbols for Use*, such as *funnel*, found on most sand and water tables. Other useful symbols to be found in both *Semantography* and *Blissymbols for Use* are *sailboat*, also found on sand and water tables; *crane*, needed for construction sites; *brush* and *comb* for that favourite doll's hair; and lastly, *bridge*.

You will find that most physiotherapists and preschool teachers do not like to see a young child sitting in a wheelchair with a lap tray for extended periods of time. For children who spend much of their time on the floor, a mobile display had to be found. We tried various methods, including placing the displays under perspex, drawing the symbols on cloth, and making individual cards, but the most successful design was a simple plasticized sheet of paper containing the 64 symbols already mentioned. This was hygienic, sufficiently flexible for the child to pick up, non-glare, and had no sharp edges. We made many of these displays and left them lying all over the floor. Additional 64-symbol and supplementary displays were explained to the parents, one of each being provided for use at home to encourage communication skills there. Once constructed, they were very durable and did not have to be replaced all year. Our only other addition was an identical display in a larger size placed on the wall for the teacher's use during group activities.

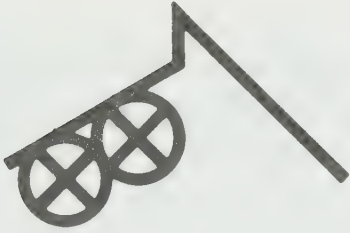
Symbols in Occupational Therapy

Every Occupational Therapy Department can provide a wealth of symbol learning experiences for children. It is necessary, though, to appreciate that most occupational therapists have a full case load to

crane

comb

brush



carry, and their area of responsibility is in training hand function, developing perceptual skills, providing supportive seating, and designing interfaces, not to mention writing reports and departmental administration. If you want to stick symbols all over their equipment, be aware that it is your responsibility to do this! I have found occupational therapists most helpful when involved in a symbol programme, but unless they are specifically assigned to a symbol project, it would seem unreasonable to expect them to do too much of the dirty work — like cutting and pasting symbols of all sizes for teaching aids. It is much better to find a volunteer for this work if you can.

Severely handicapped preschoolers are likely to be involved in gross motor training. One frequently sees mirrors covered with crazy foam in Occupational Therapy Departments, with the child's upper extremities being guided through the foam as if it were finger paint, along circular and straight lines in either horizontal or vertical planes. Such activities provide ample opportunity for learning the symbols for *sun*, *head*, *earth*, *sky*, *water*, *fire*, and *container*. The same possibilities are there during finger painting and sand drawing.

Grasp and release is an important area in the training of manual skills, and various shapes, sizes, and textures of objects are used. We have used the following for symbol reinforcement:

1. Placing small plastic people in containers marked *man*, *woman*, *girl*, *boy*, and *baby*.
2. Placing small plastic cars, boats, planes, flowers, trees, animals, birds, fish, etc. in appropriate boxes.
3. Accenting the outline of form-board shapes — frequently the same as symbols — and making the comparison between, for example, circle and *sun*, triangle and *make*.
4. Arranging symbol-labeled doll's furniture in a room setting.

Where bi-manual skills are to be encouraged, there is much scope for adding symbols to beads for either popping together or stringing. Initially, the beads may be used to match pictures to symbols alternately — one symbol animal, one picture animal. Later, the same approach can be used for associated objects, opposites, combining, and even a simple agent-action-object sentence sequence. We also found this a good way to develop a concept, by starting, perhaps, with an extra-large bead showing the symbol for *clothing*, and then getting the child to select and string the appropriate pictures of shirts, pants, coat etc. from a mixed group of picture beads.

Many children require training in supination and pronation of the hand. Here is a good opportunity for symbol learning, for as each block is turned, the child can recognize a picture and matching symbol that you have placed on its upper and lower surfaces. This same technique is again useful to reinforce opposites and associated pairs. Later, it can also be used to literally turn a noun into a verb!

Sensory stimulation to appreciate the variations in soft, hard, rough, smooth, and slippery may also be the occupational therapist's concern, and I have found no opposition to presenting the idea that possibly children could be tracing the outline of symbols made in sand, felt, leather or the smoother surfaces of mac-tac and plastics. Our preschoolers made their own sand cards, by outlining a large copy of a symbol in white paste, and up-ending it in the sand tray — another learning experience in itself.

During Activities of Daily Living sessions, there is the possibility of learning the more pictographic symbols for certain articles of clothing, and certainly one can include facial features during personal hygiene, when washing and teeth cleaning is attempted. Preschoolers may begin by dressing their dolls, and at such times, a *clothing* symbol, strategically placed, can help in learning the more complicated concept and pictorial outline encountered with that particular symbol.

Young children love music, and we used a xylophone to teach symbols and more accurate pointing skills. Each xylophone note was

decorated with a pictographic symbol, and with the child matching the symbol on the xylophone note to his symbol song sheet, he was able to render such oldtime favourites as “Old MacDonald” and “God Save the Queen.” This toy was also used in the preschool music circle.

Frequently in Treatment Centres, occupational therapy, in fact any therapy, may go on in the specific department or right in the preschool setting, since there is a certain overlap in many areas. The introduction of symbols in all areas is certainly possible, to be encouraged greatly, and has no limitation for an imaginative educator.

Fun in the Physio

The Physiotherapy Department is the “in” place for little ones to learn about body parts, spatial orientation, and direction of movement. Surely no other environment provides so many ups and downs, forwards and backwards, ins and outs, pushes and pulls, stops and goes, overs and unders, as well as a great collection of pictographic furniture! I would encourage you to make use of them all.

Within the preschool setting, our children had already been introduced to body parts, and so, during physiotherapy, we placed appropriate symbol cards around the mirror or walls where the children were given their exercises. This made it easy for the physiotherapist to make the association for them in learning symbols for *arm*, *leg*, and *head*. We also made cards for many of the postural positions the child was expected to experience, such as *stand*, *sit*, *lie*, or *kneel*. Later, we added large arrows to add *up* and *down* and gradually built in the concepts of lie down, stand up, sit down, and head up. It is also possible in standing up and sitting down to build in some reinforcement for the *big* and *little* symbols respectively: “grow big — now grow little again.”

Once mobility is being taught, arrows can again be used for *forward* and *backward* while the child is experiencing knee rocking, or actually attempting to crawl. If mobility is achieved by either walker or tricycle, directional paths in the form of a traffic game can be set up

in which the child learns *forward, backward, stop, and go*. Children learning to walk will sometimes gain more control by pushing a weighted wagon or buggy, while others may like to pull something behind their tricycle, thus creating an opportunity for you to teach *push and pull*.

The Physiotherapy Department has great potential for the use of pictographs. Here, we find beds, chairs, stools, stairs, wheels, floor, walls, and numerous toys. Those large attractive balls can be used to teach that particular symbol, though I have never actually dared to draw the symbol right on one!

Again, I would like to stress that physiotherapists, like occupational therapists, are busy people, so accept the responsibility of making the symbol cards yourself, and take time to explain exactly what you hope the wall decorations will achieve in the way of symbol learning.

Success is Total Immersion

In the early days of our preschool Blissymbol programme, each of our four non-speaking children was given individual instruction and then returned to class with his new symbol glowing on his tray. Each child was taught the same symbols to accommodate the formation of a core vocabulary. Dutifully, we all noted the display, remarking on the phenomenal luck each child had in being given such a prize. Patiently, we waited for the Blissymbol spark to be kindled — and we got nothing, just plain nothing! After one month, we abandoned this approach and threw caution to the wind: we lived, breathed, literally ate Blissymbols, and started on a truly satisfying and stimulating experience.

First, we presented the 64-symbol display to the group, explaining that this was going to be a “talking” board. We then gave a number of displays around for them to look at, with the intention of teaching one symbol, and leaving it at that for the day. Imagine our delight when the speaking children immediately began to pick out, name,

and talk about animals, men, and boats. Before we went through that morning, they had identified fifteen symbols without any help from us, and the boards had been given a special place of honour on the shelf. Every morning, they were taken down again, and set around the table for what became a daily Blissymbol session for all.

As the year unfolded, we developed a type of learning progression, which was unplanned, and which eventually had five stages.

Stage I. Within our Blissymbol circle time, the children's interest was centred around the learning of symbols. We explained, as simply as possible, the more complex symbols, and described the pictographic ones.

Stage II. Once the non-speaking children had learned a few basics of the preschool scene, we took the symbols out of the Blissymbol session and began assimilating them into every appropriate situation. At this time, we would point out a distinction to the speaking children, explaining that they said the words, whereas their symbol friends pointed to them. We also began putting symbol labels on furnishings.

Stage III. We asked for help from the speaking mobile children, and here we began asking them what their friends were pointing to and what they wanted. Once the talkers realised their usefulness, and understood the relationship they could build up with the "quiet ones," the whole character of the group changed, and they became teachers, helpers, and spokespersons.

Stage IV. We began to build on the foundation that the children had created, and directed most of our attention to encouraging the non-speaking child's independence with his board, while communicating with his peers. We feigned illness, so that a speaking child had to teach the Blissymbol class; we invented sore knees to avoid going to read a board, sending another child instead; and we turned many deaf ears.

Stage V. At the end of the year, we were able to see a class of speaking children happily integrated with the non-speakers and all having a good knowledge of symbols.

There were so many happy highlights during this period, just a

few of which I will mention to you, since they are applicable to a child's normal development in the preschool years. The role of teacher was adopted by some: felt pictures were placed on the wall board, and then the captive non-speakers were placed, complete with wheelchair and tray, in front of it for the day's lesson. "Find father — Where's your father?" were the instructions. So it went, with the whole family being involved and much chatter. There were small mothers along too, who having sat their babies in buggies, placed the symbol board on top to show that an outing was planned. Sometimes, the baby was sat upon the floor for instruction, with the "talk" board alongside, and heaven help the doll that didn't put its hand right on the symbol! And there were two little speaking girls who had an imaginary symbol house, actually a large old cardboard box, which they laid claim to. Every now and again, they would decide to go and live in the box, which they did, complete with a symbol display each, and we never heard them say one word to each other once they were inside.

So, as you can see, it was the children who taught us that symbols should go everywhere — to school, home and on outings. We followed their lead, and it was certainly the right way for us.

A Day in the Preschool

The children arrived every morning around 9:00 and stayed until 11:30. The first half hour was spent in free play, to allow for the late arrivals without disrupting the organised activities planned for the remainder of the day. Once all the children had taken off their hats and coats, a period of creativity began. All media usually found in a preschool setting were used and whenever possible adapted to symbols. The following made up some of our table sessions:

Playdough — The children made it themselves from flour, salt, and water. The symbols learned were *container* and *water*.

Plasticine and Playdough — We made animals, fish, trees, boats, etc., and then matched them with symbol shapes made out of Plasticine "worms."

Stencils — We cut the shape of symbols out of cardboard and let the children paint over them with small size rollers.

Finger painting — Allows for any symbol you want to reinforce. We used coloured flour and water, except for *food*, when we substituted instant pudding.

Cutting and pasting — Cutting the outline of the stencils and pasting to match a true picture. We made many of these pages into books.

Sand pictures — On cardboard, we outlined symbols in paste and sprinkled them with sand or turned them upside down in the sand tray.

Wool pictures — On cardboard, we outlined symbols in paste and stuck wool on them. We found that long pieces worked better than scraps.

Murals — We made them from stencils, cloth, and paper clippings, following some basic symbol designs. Our murals were both teacher-designed for storytelling and child-designed for creativity.

Mobiles — We made them from symbol shapes and hung them as decorations in the classroom.

On occasions, our table activities were used for cooking classes, often the preparation of something good for juice and cookie time. On occasions, we made jello, writing the recipe in symbols — a *container* for our bowl, *parcel* was renamed package and represented the jello, and *water*. Together these things made up the three symbols we learned on that assignment, along with some more complicated non-symbol concepts, such as hot, stir, and melt. Making popcorn is a great way for learning that something small becomes big, and the corn can be sorted later into big and little boxes marked with symbols. We also made vegetable soup, Kool-Aid to *drink*, and *flower* arrangements.

Some of our activities were freer in nature, such as time spent at the sand and water tables, the dollhouse, and with puzzles. For each of these areas, we tried to have a supplementary vocabulary nearby, showing cars, trains, boats, tables and chairs so that the speak-

ing and non-speaking could communicate during play. There are many commercially available puzzles that are excellent for symbol learning. One, showing the community, allows for the development of the total concept of house, a building, and also provides for the differentiation from store. The blocks can then be removed to show what each building is used for, allowing much scope for identification and later for combining. Another such puzzle is a house, which is great for teaching door, window, garage, and later the furnishings one finds inside the home. Once into a preschool programme, you will find yourself developing an eye for such toys!

The next thing to happen each morning was juice and cookie time, and here we hit upon the highlight of the year — symbol toast. This delicacy is made by drawing a symbol outline onto bread with a paintbrush dipped in milk, then cooking in the usual way. Up pops the toast, with the painted area white and uncooked and there's your snack which you can eat, and it really is food. It was no trouble for us to learn the *food* symbol, and the children enjoyed eating *houses*, *fish*, *big* and *little* pieces of toast and *animals* as well. We also frosted cookies, and used them to find out a child's matching ability, by having identical cards face down on the table around the cookie plate. The child turned a card and had to find the matching cookie on the plate. We had thought to use this approach to find out the number of symbols from which a child could select just one, but they were our masters at this, and we could never pile enough cookies on the plate to make this idea effective!

The end of the morning was devoted to "Circle," which was either a story with felt board, hand puppets, slides, or just a picture book. The rounding off ceremony was always a singsong.

Felt boards were used to cover many subjects. The family gave an opportunity to talk about brothers and sisters, mom and dad and family outings. Body parts were frequently learned along with the singing of "Alouette" — and symbols were there, alongside, wherever appropriate. We also made up our own stories to teach or reinforce new symbols.

Hand puppets were made in large shapes without fingers and maintained in position with an elastic band slipped over the wrist. We started by embroidering the symbol on each glove, but abandoned this later for a velcro square, which gave us more flexibility. We were then able to first use the puppets with pictures, and later change to symbols when we had learned the appropriate ones to go along with each story, like Goldilocks and the Three Bears, which became the Δ and $3 \propto$ and Little Red Riding Hood, who was a *girl* symbol drawn in red.

Books and Stories — We were very aware of the possibility that the non-speaking children would learn individual symbols, but would not realise that symbols could follow one after the other to formulate expressive language. Whenever possible during a story time, someone would be sitting alongside the non-speaking child to “model” for him on his board. With 64 symbols, it obviously was not literal translation, but a simple agent-action-object combination could frequently be found as the teacher read and often simplified a story. Speaking children also helped us here. We found a small toy television in which could be threaded a piece of paper, similar to a film passing through a camera as the knob is turned. The original shows for this T.V. set were Superman and Batman, but we made our own “symbol” shows, and the speaking children would automatically string the symbols together into a story as they turned the film reel. We hoped this helped the symbol users to realise that they could do the same thing on their boards, and, in fact, we would model these stories for them to help give them this idea. Into this time period, we built a discussion on the weather, making a daily chart to use the symbols for *sun* or *snow*, depending on the season, and we had “Show and Tell,” trying to describe the news of the day with the basic vocabulary. I’m sure that on more than one occasion our speakers would make their news fit the board rather than tell of their actual experiences, but that was a nice thought on their part.

Our morning always ended with a singalong. Many preschool songs adapt very well to a preschool vocabulary. “Put your hands

way up — put your hands way way down” we would sing, with each child holding a cardboard arrow attached to a popsicle stick and following the appropriate actions. Another of our favourites was “The Wheels on the Bus,” which allowed us to teach the *wheel* symbol, and its ability to go quickly or slowly — something that would be required symbol learning later. Our finale was always the “Goodbye” song, when each child was named, thus allowing us to give out *girl* and *boy* symbol cards.

Then it was the end of another morning. Blissymbol boards went back on the shelf. We hoped that when each child arrived home he was able to tell his parents some of the day’s events, in speech or in Blissymbols. The children had Blissboards at home, and also took new symbols home with them frequently.

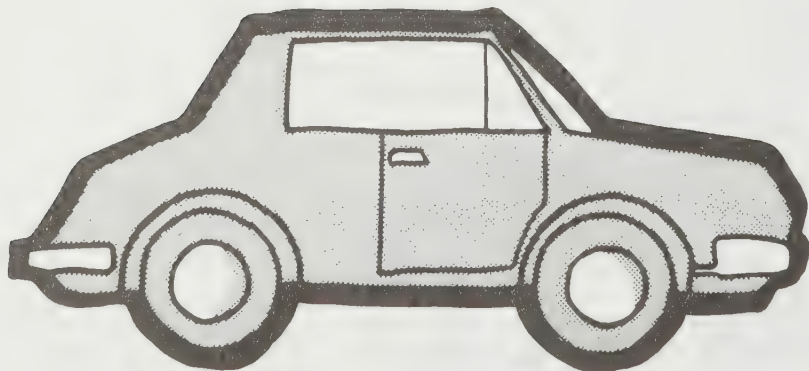
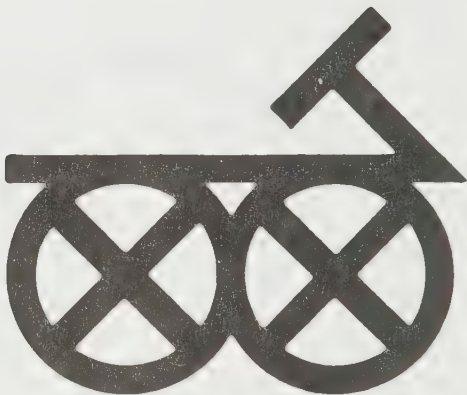
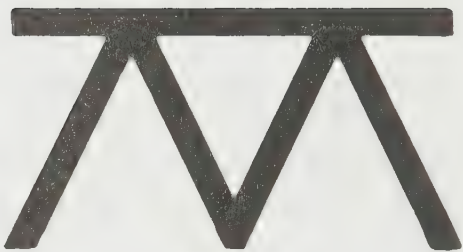
Find the Body Parts



Cut & Paste



Find Me



Volunteers — Bless Them!

If you are already involved in a Blissymbol programme, you will know the value of volunteer help. There are many commercially available toys that are suitable for use with symbols, but they still require adaptation for specific needs. Somehow each child's interest has to be maintained in spite of his handicap, and for this, he needs special learning tools. Many of these toys, all wooden items, were made for our programme by a volunteer who came to the Centre once each week to interest the older boys in woodwork. The list of toys Mr. Crane has made for preschoolers is quite extensive and they are listed below:

Two-inch wooden blocks — Symbols were stuck to the surface for the initial learning of each; for developing the idea of concepts; for finding those images which are the same; for turning over to give the idea of the change from noun to verb (for example, *eye* and *to see*; *mouth* and *to talk*); and eventually for developing simple syntax. Attaching magnets to the undersurface, and working on a magnetic board, provided additional stability for the severe athetoid.

Interlocking blocks — These were used almost exclusively to teach the strategy of combining. When an outing was planned to the local shopping centre, we made use of the occasion for the teaching possibilities in food store, animal store, library, clothing store, and post office. We used the symbol for *house* rather than *store* in these combinations, and we planned to introduce *store* later as the children learned the symbol for *money* and understood its purpose.

We had a set of large pictographic symbols cut from wood which the children could handle and play with. Mr. Crane also cut large 6" size pictographic symbols from 3/4" plywood. The children played with these as toys, being able to arrange a scene of a *house*, *tree*, *flowers*, and a *car* moving along a *street*. We also found the cut-out of *toilet* to be valuable in toilet training.

An **abacus** was made with blocks that were square, rather than with the usual circular counters, which would have meant the

frustration of continual turning for uncoordinated hands. We used this equipment as a multiple readiness type programmer. Each of the horizontally strung lines of blocks in the abacus was detachable from the frame, allowing its use for stringing the blocks, as well as for programmes requiring horizontal hand movements. When teaching, we would string each line of the abacus for the child to (a) find the thing that didn't belong, (b) find two things the same, (c) find the things for the home, (d) find things that are outdoors, and so on. The possibility of syntax could also be built into this unit by placing personal nouns along the top line, verbs on the second, followed by descriptives on the next line, and finally objects. Each child could then slide the blocks horizontally to his choices, his final sentence selection being read vertically.

A **roulette wheel** was also made. Our symbol children were unable to use dice, and in order that they might also have a turn during games, a substitute in the form of a roulette wheel was made. The base was covered with bristol board or construction paper with required symbols placed around. I think Bingo became our favourite game during the year, with Bingo cards becoming larger and more complex as the school year progressed.

We had a **word wall**, a large free-standing and upright piece of wood on which there were many velcro pads. There were also a number of small wooden tags which could be stuck to each pad. This unit was also used for readiness programmes, completion of some sentences, and the unscrambling of others.

Peg boards were something that the children enjoyed; with them they could build farms, small towns, houses, and families and many of the assignments already mentioned could be reinforced.

Our wooden materials were beautiful things. We also tried making some equipment ourselves, with very amateurish results. During the activity period, the children stuck sandpaper symbols onto styrofoam blocks made from leftover insulation materials. These blocks were easy for the children to manage, since they were large and slightly spongy in texture, and they became favourite

toys. We also enjoyed making books, placing the pictographic representation on one page and a true picture on the opposite page. We later protected our work of art with Thermafax, and also graduated to making short story books. Sometimes, we tried table bowling with symbols drawn on the pins — the back wall of our alley was set up with the coded yellow, green, and orange sequence required for a sentence. To play, roll the ball, and when the pins go down, pick one of each colour and read your sentence — no sequence, no score!

Volunteers also made us simple ditto sheets at the beginning of the year with only one or two symbols to each sheet. Many of these stencils were plasticized and used with a grease pencil, so that the work could be erased and used over again.

The list of items made by volunteers is almost endless — they give so generously of their time and are truly deserving of our appreciation.

These ideas will help you get started on a symbol programme for young children. You will make innovations of your own — the rewards are numerous and the cooperation of others is heart-warming. Good luck!

RECIPES WE NEEDED

Playdough

1 cup flour

1/2 cup salt

2 tablespoons shortening

1/3 cup water

Food colouring

Mix and knead well. Keep in plastic bag when not in use.

Library Paste

1/2 cup flour

1/2 cup sugar

1/2 tablespoon powdered alum

1 pint warm water

15 drops oil of cloves

Mix and then cook in double boiler until it has a clear appearance.

Clay

1 cup flour

1 cup salt

1 tablespoon alum

Add 1/2 cup of water and mix well.

Paper Mache

Tear up paper in pail. Cover with cold water. Let soak and then pour off excess. Add flour and stir.

Vegetable Soup

Vegetables in season

Salt and pepper

Water

Scrub vegetables in water table. Cut into small pieces. Add seasoning and water. Boil until vegetables are soft.

Dog Biscuits (Christmas gifts)

6 lbs. wholemeal flour

1 lb. cooking fat or drippings

3 tablespoons salt

6 meat extract cubes

3 pints milk or water

Mix well and roll to 1/4" thick. Cut out small biscuit shapes and cook on floured baking sheet for about 45 minutes in 350° oven.

HOW TO . . .

Preserve Flowers

Dissolve 1 lb. alum in 1 gallon of boiling water and cool. When cold, place flowers in solution and leave until solution forms crystals on the flower, stem, and leaves. Remove gently and let drip for several hours. Use for flower arrangements.

Make Dancing Snowballs (good for ↑ and ↓)

Fill a clear glass jar 3/4 full with water. Add any colouring. Then add

1 tsp. of citric acid

1 1/2 tsp. baking soda

Into this solution drop a few mothballs — they bob up and down as though dancing.

Colour Easter Eggs

Easy method: Add food colouring

Educational method: Red — colour water with beet juice

Yellow — wrap outer skins from onions
around eggs

Green — use spinach leaves

Yellow-orange — use parsley

A pinch of cream of tartar in the water gives a brighter colour. When you have coloured the water, add eggs and boil for 15 minutes. Let eggs remain in water for 5 minutes. Remove and polish with cloth dipped in salad oil.

IN THE TOY STORE

Instructo — Flannel Board — My Face and Body

Instructo — Flannel Board — We Dress for the Weather

Milton Bradley — Flannel Board — The Family

Fisher Price — Puzzle — The Community

Fisher Price — Puzzle — The House

Depreux — Puzzle — Furniture

Symbol Colouring Book available from Bliss Programme, Rideau Regional Centre, Smiths Falls, Ontario.

Motivation and Learning Centre Training Programmes for Language Delayed Children, Merlin J. Mechem, Ph.D.

Language Pictures only — 47 pictures 8 1/2" x 11" sold in replacement package by Work Making Productions, 70 West Louise Avenue, Salt Lake City, Utah 84115

Instructo — Flannel Stories — Goldilocks and the Three Bears
Red Riding Hood
Three Billy Goats Gruff

TESTS WE USED

Test for Auditory Comprehension of Language, developed by Elizabeth Carrow, Ph.D.; Learning Concepts, 2501 North Lamar, Austin, Texas 78705

Pictorial Test of Intelligence, Joseph L. French, Houghton-Mifflin Co.

Preschool Language Scales, Zimmerman, Steiner and Evatt; Chas. E. Merrill Co., Columbus, Ohio.

Peabody Picture Vocabulary Test, L.M. Dunn: Psycan Ltd., 255 Consumers Road, Willowdale, Ontario.

The Developmental Progress of Infants and Young Children, Mary D. Sheridan, O.B.E., M.A., M.D., D.C.H., Humanities Press Inc., Hillary House/Fernhill House, Atlantic Highlands, New Jersey 07716

ARTICLES WE READ

Bleck, E.E. and Headley, Lea. "Treatment and Parent Counselling for the Preschool Child with Cerebral Palsy," *Paediatrics* (June, 1971), pp. 1026-1032.

Coop, R.H., Eckel, E., and Stuck, G.B. "An Assessment of the Pictorial Test of Intelligence for Use with Young Cerebral Palsied Children," *Child Neurology* (No. 17, 1975), pp. 287-292.

Mehrabian, Albert and Williams, Martin. "Piagetian Measures of Cognitive Development for Children up to Age Two," *Journal of Psycholinguistic Research* (Vol. 1, 1971), pp. 113-126.

Vanderheiden, Greg C. and Grilley, Kate. *Non-Verbal Communication Techniques and Aids for the Severely Physically Handicapped*. Baltimore: University Park Press, 1975.

MORE ABOUT BLISSYMBOLS

Hehner, B. (ed.) *Blissymbols for Use*. Toronto: Blissymbolics Communication Institute, 1980.

Helfman, E. *Blissymbolics: Speaking Without Speech*. New York: Elsevier-Dutton Publishing Co., 1981.

Kates, B. and McNaughton, S. *The First Application of Blissymbolics*. Toronto: Blissymbolics Communication Institute, 1975.

McDonald, E. *Teaching and Using Blissymbolics*. Toronto: Blissymbolics Communication Institute, 1980.

McNaughton, S. "Augmentative Communication System: Blissymbolics," in Bleck, E.E. and Nagel, D.A., (eds.), *Physically Handicapped Children*, 2nd ed. San Francisco: Grune and Stratton, 1981.

McNaughton, S. and Kates, B. "The Application of Blissymbolics," in R.L. Schiefelbusch (ed.), *Nonspeech Language and Communication Analysis and Intervention*. Baltimore: University Park Press, 1980.

Silverman, H. *Communication for the Speechless*. Englewood Cliffs, N.J.: Prentice-Hall Inc., 1979.

Silverman, H., McNaughton, S., and Kates, B. *Handbook of Blissymbolics*. Toronto: Blissymbolics Communication Institute, 1978.

Anne Warrick, L.C.ST. is Senior Speech Pathologist, Children's Hospital of Eastern Ontario/Ottawa Crippled Children's Treatment Centre, Ottawa, Canada.

Published by **Blissymbolics Communication Institute**
350 Rumsey Road, Toronto, Ontario, Canada M4G 1R8

